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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,969

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Reinhard Stotzel

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06/09/2009

KAGAN BINDER, PLLC

SUITE 200, MAPLE ISLAND BUILDING

221 MAIN STREET NORTH

STILLWATER, MN 55082

EXAMINER

ABU ALI, SHUANGYI

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

06/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,969	Applicant(s) STOTZEL ET AL.	
	Examiner SHUANGYI ABU ALI	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-11,13,14,17-23 and 29 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 and 17-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-7,9-11,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/20/2008,01/04/2008,09/16/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group II, claims 4-7, 9-11 and 13-14 in the reply filed on 04/02/2009 is acknowledged. The traversal is on the ground(s) that the prior art fail to disclose the common technique feature of claim 1. This is not found persuasive because '182 discloses a mixture of illite, smectic and attapulgite. One of the ordinary skill in the art would reasonably assume (given a plain reading of the reference) that each clay is present in equal proportions, therefore the ratio of the three clays would meet the limitation of claim 4. '445 disclose the using of the attapulgite type clay, it is known in the art that the attapulgite type contains illite and smectic, which has the ratio meeting the limitation of claim 4 (please see the evidence US. Patent No. 6444601)

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,444,601 to Purcell et al.

Regarding claim 4, Purcell et al. disclose a composition comprising attapulgite, smectic and illite. The amount of the attapulgite is 60%, Smectic amount is 25% and illite amount is 1 %.(table 1 and Examples)

Regarding claim 7, Purcell et al. disclose that water is used to slurry the composition.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4-6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 5,164,433 to Ricci et al., in view of U.S. Patent No. 6,444,601 to Purcell et al.

Regarding claims 4-6, Ricci disclose a coating composition comprising rheological additive and latex). The clay amount in the rheological additive is in the

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range of 0.1-99.9%. The clay is select from the illite, smectic, attapulgite, and kaolin et al. The rheological additive amount is in the range of 0.05-15%. (abstract, col.5, lines 17-18, claims 2 and 12)

But they are silent about the ratio of the illite, smectic and attapulgite clay as applicant set forth in claim 4.

Purcell et al. disclose a composition comprising attapulgite, smectic and illite. The amount of the attapulgite is 60%, Smectic amount is 25% and illite amount is 1%.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use Purcell's clay composition in the teaching of Ricci, motivated by the fact that Purcell, also drawn to clay, disclose that their clay composition is made from economic and efficient method and the clay has uniform physical and chemical properties to provide rheological property. (col.3, line 3-4, 10-12)

Regarding claim 11, Ricci discloses that the additive can be used with a binder.

Claims 4, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 4,728,531 to Matz et al., in view of U. S. Patent No. 6, 444, 601 to Purcell et al.

Regarding claims 4 and 9 -10, Matz et al. disclose a composition comprising clay to impart thixotropic property and zirconium silicate. (abstract and col.4, lines 19-20).

But they are silent that the rheological additive is illite, smectic and attapulgite clay with a ratio as applicant set forth in claim 4.

Purcell et al. disclose a composition comprising attapulgite, smectic and illite. The amount of the attapulgite is 60%, smectic amount is 25% and illite amount is 1%.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use Purcell' clay composition in the teaching of Matz et al., motivated by the fact that Purcell, also drawn to clay, disclose that their clay composition is made from economic and efficient method and the clay has uniform physical and chemical properties to provide rheological property.

Claims 4, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No.4,015,045 to Rinehart, in view of U.S. Patent No. 6,444,601 to Purcell et al.

Regarding claim 4 and 13-14, Rinehart discloses a composition comprising a rheological additive and glass. The glass comprises silica, sodium oxide, and alumina. (Abstract and col. 22, lines 48-51))

But they are silent that the rheological additive is illite, smectic and attapulgite clay with a ratio as applicant set forth in claim 4.

Purcell et al. disclose a composition comprising attapulgite, smectic and illite. The amount of the attapulgite is 60%, smectic amount is 25% and illite amount is 1%.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use Purcell' clay composition in the teaching of Rinehart, motivated by the fact that Purcell, also drawn to clay, disclose that their clay composition is made

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from economic and efficient method and the clay has uniform physical and chemical properties to provide rheological property.

Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. patent No. 5,925,182.

Regarding claim 4, '182 disclose a composition comprising clay, which can be any clay, such as illite, smectic and attapulgite (col.7, lines 60-65). Although they are silent about the ratio of the illite, smectic and attapulgite, it would have been obvious to one of the ordinary skill in the art would reasonably assume (given a plain reading of the reference) that each clay is present in equal proportions, therefore the ratio of the three clays would meet the limitation of claim 4.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHUANGYI ABU ALI whose telephone number is (571)272-6453. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.A. LORENZO/

Supervisory Patent Examiner, Art Unit 1793

/S. A./

Examiner, Art Unit 1793